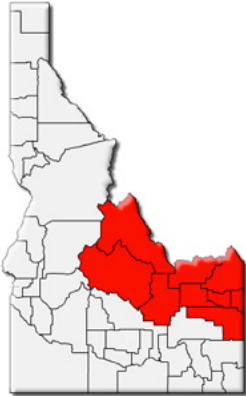# Region 6 Broadband Investment Plan

Priority Need

[1] Nine counties including Bonneville, Butte, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, and Teton make up the Region 6, East Central Idaho. Region 6 includes dozens of smaller communities, with the vast majority smaller than 1,000 in population. Only Idaho Falls, Rexburg, and Ammon have a population base larger than 10,000 people. Region 6 on average is less dense than the rest the state with 11 people per square mile compared to an average of 19 people per square mile for the state as a whole. Bonneville County is the largest population center for the region with an estimated 101,329 people in 2009. The smallest county in the region is Clark, with an estimated 2009 population of only 952 people.

[2] Region 6's geographic barriers make it a challenge to connect with other areas of Idaho including their high-speed fiber infrastructure. The region has mountains, forests, and few highways traversing it. The City of Salmon in Lemhi County is a small rural community of 3,300 nestled in the mountains of Central Idaho near the Montana border. Rexburg, 30 miles northeast of Idaho Falls, is the Madison County seat and home to Brigham Young University –Idaho, with a population over 27,000.

[3] Three of the nine counties in the region have experienced population decline over the past decade. Population increased 55.7% in Teton County between 2000 and 2009 and nearly 40% in Madison County during this time period. Other counties experiencing population gain over the past decade are Jefferson 29.5% and Bonneville 22.8%.

[4] Only 14.4% of Idaho's population has a Bachelors Degree or higher, which is 10% lower than the US average of 24.4%. In Region 6, 82.4% of persons over the age of 25 have a High School diploma or higher. This compares with 82.9% for the state and 80.4% for the nation. The proportion of the population graduating from a four-year degree program is higher than the state average. 18.5% of the Region 6 population older than 25 have a Bachelor's degree or higher. This compares with 14.4% for the state and 24.4% for the nation. Clark County has the lowest percentage 64% of persons over the age of 25 who have earned a High School diploma or higher. Teton County has 28.1% the highest percentage of persons over the age of 25 holding a Bachelor's degree or higher.

[5] Idaho Department of Labor Industry 2006-2016 workforce data projects job growth will occur across a wide spectrum of occupational skill categories. Some fields such as Health Care Support Occupations and Education, Training, and Library Occupations will require workers with higher levels of education. Overall the occupational and industry trends demonstrate the need for effective education and training networks including the continued leveraging of distance delivery technologies supporting access at home and at places of work.

[6] To meet this need and to respond to ongoing budget cuts to education, educational institutions are developing distance learning resources. In the 2011 legislative session, legislation was passed that requires high school students to take two distance learning courses before graduation. East Idaho Technical College (EITC) is working on a virtualization initiative that would enable students to access classes and applications from home. District 91 in Idaho Falls and District 93 want to their supplement connectivity with a fiber connection to EITC. They have been busing students to EITC for courses, however with budget cuts, they are looking at distance learning instead. EITC is interested in connecting to IRON, which would give students access to that high-speed network as well. To access these resources remotely from home or their communities, many areas need better access to higher speed broadband.

[7] The University of Idaho needs more connectivity in the counties to deliver classes and communicate with employees. University Place is interested in delivering classes in the region, but bandwidth availability is insufficient. Small towns within 15 miles of Idaho Falls and the University of Idaho have a lot of students, staff and faculty that need to access broadband education resources but the connectivity is poor. The University of Idaho would like to have good connectivity in all county offices such as the Agriculture Extension offices, which are typically in county buildings. These sites could then become locations for accessing distance learning resources so people don't have to drive in as far for classes.

[8] Areas outside of the population centers, including Salmon, are particularly challenged in getting access to higher bandwidth. Even public safety institutions need higher speed broadband to utilize web training resources. The municipalities and schools in Lemhi County need fiber still.

The City of Ammon adopted a policy several years ago that broadband was an essential item like water and sewer. They sought funding to create an open access municipal network, but their applications were denied. They are in the process of building out to their facilities and looking for community anchor institutions such as school districts. They are seeking partners that want to reach residents in Ammon.

[9] According to the June 2010 LinkIDAHO provider survey, some counties have no options for fiber connectivity including Madison, Jefferson, Fremont, Clark, and Butte Counties. Putting in infrastructure that all carriers can use will enhance competition and availability of providers.

2: Overview of Regional Opportunity

[1] A diverse group of stakeholders has been meeting since December 2010 to assess regional needs that can be advanced by more available and more widely utilized broadband services. The team identified the following regional priorities for which expanded broadband access is needed:

- Enhance access and use of technology in low-income and rural communities.
- Enhance distance education including in rural communities.

- Increase bandwidth in areas to support work at home initiatives.
  - BYU-Idaho is interested in implementing a work at home initiative. Their President wants them extend their enterprise network .75-1 miles to include entire student population and offer 3 MB up and down, including to those from lower socioeconomic groups. They are trying to partner with the City of Rexberg and Madison County to make the initiative more affordable.
  - The Idaho National Laboratory (INL) is interested in implementing a work at home initiative, especially outside of population centers. Their employees need higher bandwidth though so that they can use modeling simulations and have higher quality video, web conferencing, and teleconferencing.
  - The City of Rexberg is interested in work at home initiatives, but their broadband is insufficient to support it. They are working with BYU-Idaho and IRON, looking at redundancy in the area, examining what they can do to help BYU-Idaho expand and how the bandwidth could support business attraction and retention.

[2] The team selected **enhancing access to high-speed broadband in more rural communities as a focus for their plan--starting with Lemhi County and the Rexburg area**. By focusing on this priority other sectors, such as education and economic development will benefit as well.

[3]There are some ongoing initiatives that can be leveraged to support regional broadband needs:

- BYU-Idaho and the City of Rexburg are exploring a partnership for a fiber initiative, which would bring better bandwidth to student housing, support online learning, and increase access to better broadband for Rexburg businesses and citizens. They are working with government entities —county, fire, police, sheriff, school districts and has a consultant gathering information regarding operating models, engineering possibilities. The project would impact Rexburg and areas of Madison County; surrounding communities should benefit as well. This model could potentially could be replicated in other regions.
- The Lemhi education project is progressing. They will begin holding distance learning classes in the fall at Northern Idaho College (NIC) for high school students and people in community interested in distance learning. Some interactive classroom activities will require high bandwidth.
- CusterTel is exploring an extension of its fiber network between Chalice and Salmon to include the Salmon Valley Business Innovation Center. The Salmon Valley Business Innovation Center is an organization that encourages business growth and employment opportunities in the Lemhi Valley. CusterTel has six nodes in Salmon. Outside of city limits, CenturyTel connectivity comes from the east via Highway 28 into Salmon. A combination of provider efforts would be needed to serve Lemhi County. The towns of Northfork, Ellis, Tendoy, and Leadore would be able to tie into that network. Having a complete connectivity ring to municipalities and schools in the community would be a goal to reach. Find out more from Dennis Thornock at CusterTel, and the CenturyTel representative Scott Benton.

[4] There are some assets that can support education delivery beyond the school day. Many schools, such as Sugar Salem High School, have strong technology resources and could open their doors for community access to technology and training after school.

[5] Better public computing resources will be available through the Idaho Commission for Libraries' Broadband Technology Opportunity Program (BTOP) grant. They are upgrading connectivity at 10 libraries in the area. Lewisville library could have up to 5 computers available. Other places will have 20-30. Department of Labor will offer training at libraries including on the Career Information System. Adult Basic Education classes will be offered as well.

[6] This document provides a plan to enhance access to high-speed broadband, including in rural areas. It will outline how communities can enhance awareness of the benefits of broadband, collect data on current broadband availability and needs, and aggregate broadband demand to promote greater broadband services in communities. Lemhi County, Salmon and Rexburg areas all have a need to gather this broadband investment information, so this plan will outline a process that can be conducted in many communities. The background information assembled in this plan also lays the foundation for additional investment plans targeted to other regional priorities.

3: Proposed Broadband Investment

[1] The following table provides an overview of key planned investments to enhance access to distance education, including in rural areas:

Type of Investment	Activities	Responsibility	Dollar Value[1]
Leadership	• Form local regional leadership team in Lemhi County (and Rexburg if needed). • Solicit and manage regional partnerships. • Apply for grants if needed.	Wayne & Terry	TBD
Research	• Identify timeline, factors, and route for build-out of the BYU-Idaho/Rexburg initiative and examine how it could benefit the region. • Assess current education, government, health care, and economic development broadband needs and resources. • Assess broadband gaps.	RPT Wayne & Terry via LinkIDAHO survey	

Type of Investment	Activities	Responsibility	Dollar Value[1]
Awareness Programs	• Enhance awareness of broadband benefits through use of LinkIDAHO modules, presentations, and outreach. • Match regional resources (such as business training programs, computer literacy training, health care programs, etc.) with needs.	Wayne & Terry with support from LinkIDAHO modules & templates	
Address Broadband Service Gaps	• Engage providers to find solutions critical broadband service gaps. • Apply for broadband infrastructure grants if needed.	RPT	

[1] - Note the "dollar value" of investment includes volunteer time, allocation of existing staff to project tasks, new paid staff and other costs. See budget below.

4: Key Tasks and Timeline

These tasks outline how communities can enhance awareness of the benefits of broadband, collect data on current broadband availability and needs, and aggregate broadband demand to promote greater broadband services in communities. Lemhi County, Salmon and Rexburg areas all have a need to gather this broadband investment information, so this plan will outline a process that can be conducted in any of these communities.

Phase 1: Assess Demand

Summer to Fall 2011

Task 1.1
Expand the Regional Planning Team to include key stakeholders who may have need of this enhanced connectivity. For example, add representatives from the power company, business, municipalities, Small Business Development Council, public safety and health care. (Lead: Terry Butikofer to support Rexburg area efforts and Wayne Tallmadge will assemble Salmon area group. Terry will meet with Scott Johnson to share broadband demand assessment and awareness tools.)

Task 1.2.
If needed, do some verification of Community Anchor Institution data. (Leads: Terry for Madison County and Wayne for Lemhi and Custer County)

Task 1.3

A short survey will be drafted to assess current broadband connectivity as well as current and desired uses of broadband by key industry sectors.

(Lead: Karen Manuel)

Task 1.4

Distribute demand survey to determine broadband needs at education, health care, government entities, businesses, business development centers, libraries, residents, and non-profit organizations such as Partners for Prosperity. Identify key people and organizations to distribute the survey, such as Department of Labor. Identify events or venues to announce this data collection effort.

(Lead: Wayne & Terry)

Task 1.5

Information collected through survey will be analyzed and summarized. A report on the survey data will be shared with Regional Planning Team, key stakeholders and service providers. (Lead: See if a university such as BYU-I can assist.)

Task 1.6

Develop resources and recommendations that can mobilize communities to successfully market themselves to broadband providers. This will include an early focus on engaging county and city engineers and planners to understand how broadband planning can fit within other comprehensive planning and infrastructure initiatives. For example when a trench is open, there can be coordinated communication so the all utilities can take advantage of the opportunity to bury broadband. Generate awareness of policies and funding resources that can support broadband development and access, such as ordinances that can be passed to support infrastructure development. Coordinate proposals and initiatives to support best use of available assets. By openly sharing construction plans, area health care, education, government, business and other sectors can reduce their cost of completing infrastructure projects. (Lead:? Resources to support communication can be developed by LinkIDAHO staff.)

Phase 2: Assess Infrastructure Expansion Options

Winter 2011 to Summer 2012

Task 2.1

Examine how the BYU/Rexburg fiber initiative could be leveraged to support regional needs. Find out the key factors, route and decision making process. (Lead: Terry Butikofer. Wayne can talk to education institutions in Lemhi and Custer County.)

Task 2.2

Review available data and assess options and solutions. Focus priority on areas where a business case for at least one provider for expansion can be identified. Could identify a strategic area where telecom wants to build out but finds challenges. Find out how EITC's interconnect through IRON could support additional school district connectivity. Find out how new fiber into Salmon could benefit Lemhi County, including telemedicine efforts. (Lead: Terry Butikofer & Wayne Tallmadge)

Task 2.3

Organize regional support for provider, municipal or other organizational loan/grant applications as may be needed to advance solutions to broadband gaps in areas. (Lead: Terry Butikofer & Wayne Tallmadge)

Phase 3: Generate Awareness about Broadband Benefits and Availability of Education and Training Resources

Spring to Summer 2012

Task 3.1

Promote broadband awareness through public awareness campaign which includes presentations, email outreach through organizations and associations to share Broadband 201 Module, LinkIDAHO movies, Small Business Module, Idaho Commission for Libraries broadband resources at lili.org and others. (Lead: Karen will compile resources that can be customized for local needs.)

Task 3.2

Identify education and training resources available to support needs for schools, libraries, universities, colleges, cities, and employers. Identify what workforce training resources exist through the Department of Labor, EITEC, the State Vocational Education agency, colleges and others. Partners for Prosperity has a technology training program that could be expanded. The Latino Economic and Development Center has a new computer center and assists low-income Latino entrepreneurs to develop small businesses and access capital and training. This training is open to other people as well.(Lead: Libraries, organizations that offer training)

Task 3.3

Explore whether schools can support public computing needs and host trainings. Outreach to schools to enhance access to computing technologies after school. May run into software licensing issues when using school computers to serve others after school. (Lead: ?)

Task 3.4

Increase awareness and use of distance learning and education resources. (Lead: Libraries, organizations that offer training)

5: Budget

Budget Category	Project 2011 Budget	Project 2012 Budget
Infrastructure	TBD	To Be Determined
Equipment	TBD	To Be Determined

Paid Staff:
 	
  Contributed Paid Staff Time
  Funded Paid Staff Time
	To Be Determined	To Be Determined

Infrastructure Funding: TBD

[1] See how or if the BYU and the City of Rexburg fiber initiative could be leveraged. It will bring better bandwidth to student housing, support online learning, and increase access to better

broadband for Rexburg businesses and citizens. They are working with government entities —county, fire, police, sheriff, school districts and has a consultant gathering information regarding operating models, engineering possibilities. They will put together business plan. The project would impact Rexburg and areas of Madison County; surrounding communities should benefit as well. This model could potentially be replicated in other regions.

[2] There is commitment to do the engineering phase once the feasibility study is conducted. Upwards of $.5 mil has been committed by partners to date. If do FTTH or hybrid fiber/wireless, city limits and area immediately surrounded community will benefit.

[3] A partnership with the power company could be helpful. May want to develop a map or overlay of where power companies and cooperatives are because they have easements. Lemhi County is served by Idaho Power.

[4] Other funding sources to explore include:

- USDA rural development. Has Communities Connect Grant
- Providers
- Universal service funds (USF) and Rural Utilities Service (RUS)
- RDA, CDBG
- E-Rate
- US UCAN
- Municipal bonds

Equipment and Supplies: TBD

Paid Staff: TBD

Contributed In-Kind Staff: TBD

Funded Paid Staff: TBD

Volunteer Time: TBD

Some economic development agencies and the Department of Labor Business Solutions (business service specialists) could play a role in surveying businesses' broadband needs. Rexburg has an entrepreneurial center and Small Business Development Centers do business consulting or project consulting in various areas. There might be a small fee for that. They could be a resource to do the gap analysis.

Number of Volunteer Hours: TBD

Value of Volunteer Hours: TBD

Other Investment: TBD

[1] INL has been involved in STEM education efforts. See what their interest is in supporting connectivity, education, and workforce related efforts in area. Other companies to explore for support include Simplot, Melaleuca, Premiere, and Albertson's Foundation.

[2] Libraries could apply for USDA funding to expand library spaces to support more public computing access.

6: Anticipated Outcomes and Impacts

[1] The proposed broadband investments are anticipated to result in several important positive outcomes and impacts for the region including but not limited to:

- A well-trained workforce supports economic development and expansion.
- Improve access to and use of broadband for distance business, education and workforce training resources.
- Greater economic development in rural communities.
- Improved affordable access to high speed broadband through community organiztions and libraries for job training and education.
- Students and residents in the small rural communities will have access to the same quality of education opportunities as those in urban communities.

Three-Year Objectives

[2] The following objectives are targeted for region 6 by 2014:

- Rural communities will maintain or increase population. Access to education can improve the ability of rural populations to remain rural and to flourish.
- Both urban and rural areas in Region 6 will attract and retain businesses because of availability of a high-qualified workforce and the access to education/training opportunities to support businesses and families.
- Ninety-five percent of "rural" homes in the region will have access to a broadband connection of 3.0 Mbps download or greater.
- At least 25% of rural residents in the region will use a broadband service connection to access training or educational content.

7: Monitoring and Evaluation

[1] Subject to available funding, LinkIDAHO and the in-state measurement and evaluation partner will support Region 6 design and implement a comprehensive monitoring and evaluation effort. The monitoring process will focus initially on collecting data on inputs, activities and processes. The evaluation process focuses on outputs, outcomes and impacts.

Inputs → Activities → Processes → Outputs → Outcomes → Impact

[2] Examples of inputs include such things as number of volunteer hours, hours of paid staff time, number of local partners engaged or time spent in planning meetings. Activities and Processes are such things as progress towards collection of baseline data on broadband access and distance learning resources. The measurement and evaluation team will create on-line tools to support this necessary data collection.

[3] The evaluation process will focus initially on outputs and outcomes defined by the above objectives, for example, expanded awareness of education and training resources, usability of broadband for education and training, or improving broadband connectivity. Impact data will go beyond outputs and outcomes to determine such things as the economic benefits of distance learning initiatives on the region. As a data point, the Monitoring and Evaluation Framework will incorporate broadband provider/subscriber data such as the Federal Communication Commission's Form 477 (or equivalent).

[4] Subject to available funding, a detailed monitoring and evaluation plan will be designed and implemented early in 2012.

8: Sustainability Plan

[1] Success in attracting the targeted broadband investments will depend significantly on an upfront project design that assures the initiative will be sustainable into the future. This sustainability will be achieved through the strategic engagement and leveraging of existing organized efforts in the region that include but are not limited to:

- Policies that can support broadband infrastructure development
- Collaboration between private and public partners.
- Advocacy by residents, businesses, economic development groups, healthcare and education institutions.

9: Appendices

Supporting data addressing topics such as:

Appendix A: Regional Description

[1] Region 6 includes dozens of smaller communities, with the vast majority smaller than 1,000 in population. Only Idaho Falls, Rexburg, and Ammon have a population base larger than 10,000 people.

[2] Region 6 on average is more dense than the rest the state with 21 people per square mile compared to an average of 1.8 people per square mile for the state as a whole. Bonneville County is the largest population center for the region with an estimated 101,329 people in 2009. The smallest County in the region is Clark, with an estimated 2009 population of only 952 people.

[3] Three of the nine Counties in the region have experienced population decline over the past decade. Population increased 55.7% in Teton County between 2000 and 2009 and nearly 40% in Madison County during this time period. Other Counties experiencing population gain over the past decade are Jefferson 29.5% and Bonneville 22.8%.

[4] The population in Region 6 on average is younger than the average for the State of Idaho. Based on 2008 Census of Population estimates, 27.4% of Region 6 population are younger than 18 compared to 20% for the state as a whole. Freemont, Bonneville, and Jefferson Counties have the highest proportion of minor citizens with 30% or more of the population younger than 18 in 2008. Custer County has the

lowest proportion in this demographic group with around 19% of the population younger than 18.

[5] The demographics of the region is also distinguished by a relatively high percentage of Hispanics. 11.6% of the region's population are Hispanic compared to 2% of the state's population overall. The largest concentration of Hispanics are in Clark County with 40.4% of the population. This is followed by, Fremont and Teton Counties with 13.2% and 12.9% of the population respectively.

[6] A lower proportion of the population of Region 6 have graduated from High School compared to the state. In Region 6, 82.4% of persons over the age of 25 have a High School diploma or higher. This compares with 82.9% for the state and 80.4% for the nation. However, the proportion of the population graduating from a four-year degree program is higher than the state average. 18.5% of the Region 6 population older than 25 have a Bachelor's degree or higher. This compares with 14.4% for the state and 24.4% for the nation. Clark County has the lowest percentage 64% of persons over the age of 25 who have earned a High School diploma or higher. Teton County has 28.1% the highest percentage of persons over the age of 25 holding a Bachelor's degree or higher.

Appendix B: Regional Economy

[1] On average, 2007 income levels for persons living in Region 6 are higher than the state average $26,225 per capita versus $24,789 per capita. Per capita income in Region 6 is higher than the state average, with only two exceptions, Fremont County having an estimated 2007 per capita income in excess of $22,000 and Madison County having an estimated 2007 per capita income of $16,212. 2008 estimated poverty rates are also lower with 14.2% of the Region 6 population living below the poverty line compared to 19% for the state. The highest percentage of poverty is Madison County with 25%, the lowest Teton County at 8%.

Source for data below:

> http://www.lmi.idaho.gov/RegionalLaborMarkets/EastCentral/tabid/2263/Default.aspx
> Industry Projections 2006-2016 file title 2006-2016 EC All Industry.xls

[2] The Idaho Department of Labor Industry projects non-farm employment growth by industry for each of the state's six development regions. Region 6 is a part of the East Central Idaho Labor Market region including Bonneville, Butte, Clark, Custer, Fremont, Jefferson, Lemhi, Madison and Teton counties. The following table identifies the projected employment change by major sector for the East Central Labor Market.

- Total Employment net new jobs 18,050
- Self-Employed and Unpaid Family net new jobs -279
- Agriculture, Forestry, Fishing and Hunting net new jobs -264
- Mining net new jobs 59
- Utilities net new jobs -26
- Construction net new jobs 1,998
- Manufacturing net new jobs 1,108
- Wholesale Trade net new jobs 1,904
- Retail Trade net new jobs 1,417

- Transportation and Warehousing net new jobs 655
- Information net new jobs 802
- Finance and Insurance net new jobs 388
- Real Estate and Rental and Leasing net new jobs 244
- Professional, Scientific, and Technical Services net new jobs 955
- Management of Companies and Enterprises net new jobs 72
- Administrative and Support and Waste Management and Remediation Services net new jobs 840
- Educational Services (all ownership) net new jobs 1,079
- Health Care and Social Assistance excluding federal net new jobs 4,625
- Arts, Entertainment, and Recreation net new jobs -155
- Accommodation and Food Services net new jobs 1,361
- Other Services (except Public Administration) net new jobs 310
- Government (all federal, state w/o educ & hospitals, local w/o educ & hospitals) net new jobs 951
- Unknown net new jobs 6

[3] In general, the projected future growth prospects are positive for most of the economic drivers in the region. Job growth is expected in Construction, Real Estate and Rental and Leasing, and Utilities. These sectors are expected to add significant jobs over the ten year period beginning in 2006 and ending in 2016. Between 2006 and 2016, Mining, Manufacturing, Health Care, and Accommodation and Food Services are projected to decline for the East Central Labor Market Region.

[4] Major Employers

The top five employers in each county typically employ at least 50 people and often more than 200. However the top five employers across Region 6 employ 1000 to 6,999 people. Several other employers employ 600 to 799 people. These employers are reflective of the regions economic drivers described above, led in particular by health care, education, and manufacturing.

> *Workforce Profile:*
> *NOTE OCCUPATIONAL PROJECTIONS FOR WORKFORCE DEVELOPMENT REGIONS ARE AVAILABLE IN EXCEL FORMAT AT*
> *http://lmi.idaho.gov/Occupations/LongTermProjections/20082018RegionalLon...*

[5] The following occupational categories are projected to result in the ten largest net job growth between 2008 and 2018 within the Idaho Department of Labor, East Central Idaho Occupation Projections of which Region 6 is a part.

- Total, All Occupations net new jobs 17,958
- Office and Administrative Support Occupations net new jobs 2,309
- Sales and Related Occupations net new jobs 1,931
- Healthcare Practitioners and Technical Occupations net new jobs 1,470
- Transportation and Material Moving Occupations net new jobs 1,326
- Food Preparation and Serving Related Occupations net new jobs 1,165
- Education, Training, and Library Occupations net new jobs 1,150
- Motor Vehicle Operators net new jobs 1,081

- Business and Financial Operations Occupations net new jobs 1,070
- Retail Sales Workers net new jobs 1,066
- Healthcare Support Occupations net new jobs 933

[6] These data emphasize job growth is projected to grow across a wide spectrum of occupational skill categories. Some fields such as Health Care Support Occupations and Education, Training, and Library Occupations will require workers with higher levels of education. Others such as Food Preparation may require less formal post high school education.

[7] Overall the occupational and industry trends framing economic development in the East Central Region, Region 6 point to the need for effective education and training networks including the continued leveraging of distance delivery technologies supporting access at home and at places of work.

[8] Workforce Challenges - According to Will Jenson, Regional Economist at the Idaho Department of Labor, the more populated counties of the region have maintained an unemployment rate well below state and national rates; still, many workers are still struggling to find work. The largest percentage of Idaho Falls MSA unemployment claimants are from the construction industry – about 20 percent. Claimants from wholesale and retail trade industries account for 14 percent and 7 percent respectively. The recession has also impacted manufacturing, which accounts for 10 percent of unemployment claimants. Recent estimates show that east central Idaho accounts for 13 percent of Idaho's covered employment and only 8 percent of total extended benefit recipients. Workers from construction related industries account for 26 percent of those on extended unemployment.

[9] As the economy improves many unemployed workers will have a difficult time transitioning back to full-time employment. Many of the long-term unemployed have had little or no work experience during the course of the recession. Those seeking to work in high-tech jobs may have little experience with technology developed in recent years. Some industries will rebound faster than others. Construction will probably rebound the slowest. Unfortunately, there will be many workers who will persist in seeking construction related employment instead of acquiring new skills for industries with a more encouraging outlook.

Commuting Statistics:

- Lemhi County, Idaho 12.9
- Madison County, Idaho 13.8
- Clark County, Idaho 14.1
- Bonneville County, Idaho 20.0
- Fremont County, Idaho 20.7
- Custer County, Idaho 23.1
- Butte County, Idaho 24.1
- Teton County, Idaho 25.1
- Jefferson County, Idaho 25.6

Appendix C: Broadband Availability

[1] Seventeen different providers responded to the June 2010 LinkIDAHO "provider survey" indicating

they deliver a broadband service within the East Central Region. Among those providers, six report delivering Digital Subscriber Line Service, three cable providers offer a broadband service, three telephone companies deliver broadband to the customer with a direct optical fiber connection, one offers fixed wireless service and four provide mobile broadband service. The table below summarizes the number of broadband service providers offering service in each county of the region for the different technologies.

	Telco xDSL	Cable	Fiber	Fixed Wireless	Mobile Wireless
Reported Maximum Download Speeds	1.5 Mbps - 10 Mbps	768 Kbps - 10 Mbps	6 Mbps - 10 Mbps	1.5 - 3 Mbps	768 Kbps - 1.5 Mbps
Bonneville	2	1	1	1	3
Butte	1	1	0	0	1
Clark	0	0	0	0	2
Custer	3	1	1	0	2
Fremont	1	2	0	1	3
Jefferson	1	1	0	1	3
Lemhi	1	3	2	0	2
Madison	1	1	0	1	3
Teton	1	1	1	0	3

Telco xDSL

Digital Subscriber Line (DSL) is the most prevalent of broadband services in the region. DSL has been the primary broadband technology deployed by telephone companies for quite some years because it makes good use of existing phone lines. East Central Idaho providers responding the the LinkIDAHO survey report maximum download speeds ranging between 1.5 Mbps to 10 Mbps over DSL lines. Many factors determine the potential delivered speed. At least one DSL provider operates in every count of the region. Qwest reports offering DSL in most counties of the East Central Region. Silver Star Communications, Albion Telephone Company, Custer Telephone Cooperative, Inc., MTE Communications, and Century Link offer DSL within parts of the East Central Region. No companies report offering service in Clark County.

Cable

Three cable TV companies also offer high speed internet service. Broadband is provided over a combination of coaxial and fiber lines with speeds. Together, Cable One and Independent Cable offer a high speed internet service in all East Central Counties with the exception of Clark County. No companies offer service in Clark County. Custer Telephone Broadband Services reports offering a cable service in Lemhi County. Maximum download speeds offered by cable providers responding to the LinkIDAHO survey are between 768 Mbps and 10 Mbps.

Fiber

Silver Star Communications provides fiber to the customer service in Bonneville and Teton Counties. Custer Telephone Cooperative, Inc. provides fiber-based broadband in Custer and Lemhi Counties. Custer Telephone Cooperative, Inc., offers service in Lemhi County. No companies offer fiber in Madison, Jefferson, Fremont, Clark, and Butte Counties. Fiber has an advantage over DSL in that high speeds can

be transmitted further from the primary network serving equipment. The companies providing fiber to the customer connections in East Central Idaho report maximum download speeds in the range between 6 Mbps to 10 Mbps.

Fixed Wireless

DigitalBridge Communications is the only fixed wireless service provider in East Central Idaho, they service Bonneville, Fremont, Jefferson, and Madison Counties. No companies work in Teton, Lemhi, Custer, Clark, and Butte Counties. The companies providing fiber to the customer connections in East Central Idaho report maximum download speeds in the range between 1.5 Mbps to 3 Mbps.

Mobile Wireless

Verizon Wireless provides a broadband service in all nine East Central Idaho Counties. AT&T Mobility LLC, Silver Star Wireless, and Sprint also offer broadband service in selected areas of the region. Teton, Madison, Jefferson, Fremont, and Bonneville have three different mobile wireless broadband providers. Other Counties have one or two mobile wireless providers. Mobile wireless carriers providing a broadband service in the region indicate the maximum download speed they offer is between 768 Kbps and 1.5 Mbps.

The following tables indicate broadband availability by census block for businesses and households according to the LinkIDAHO provider survey in 2010:

Number of Business Firms per Download Speeds for Region 6

Total Number of Business Firms: 11,646

Number of Business Firms in Census Blocks with Mobile Broadband only: 509

Number of Business Firms in Census Blocks with Advertised speeds of Less than 768 kbps or No broadband available: 120

Number of Business Firms in Census Blocks with Advertised speeds of 768 kbps - 3 Mbps: 1,853

Number of Business Firms in Census Blocks with Advertised speeds of 3 Mbps - 10 Mbps: 1,387

Number of Business Firms in Census Blocks with Advertised speeds of 10 Mbps - 25 Mbps: 8,286

Number of Business Firms in Census Blocks with Advertised speeds of 25 Mbps or greater: 0

Number of Households per Download Speeds for Region 6

Total Number of Households: 62,261

Number of Households in Census Blocks with Mobile Broadband only: 2,515

Number of Households in Census Blocks with Advertised speeds of Less than 768 kbps or No broadband available: 529

Number of Households in Census Blocks with Advertised speeds of 768 kbps - 3 Mbps: 9,215

Number of Households in Census Blocks with Advertised speeds of 3 Mbps - 10 Mbps: 6,111

Number of Households in Census Blocks with Advertised speeds of 10 Mbps - 25 Mbps: 46,406

Number of Households in Census Blocks with Advertised speeds of 25 Mbps or greater: 0

Libraries

Issue with Preston (connectivity, affordability), Island Park can't get more than 3MB.

Appendix D: Broadband Adoption

[1] LinkIDAHO launched a consumer research survey during July 2010 in Idaho to ask residents about broadband high-speed internet service. The focus of the research was to identify how households use broadband and the benefits that are derived from its use. A combination of telephone interviews and on-line surveys was used to capture this information.

[2] From Region 6 East Central Idaho, 190 people responded to the survey. They were asked to select how many hours per day their household spends online. Over 46% of the Region 5 population access the internet from 1 to 3 hours per day. Of those who responded to the survey, 15.5% selected they access the Internet one hour or less per day. 18.8% selected 3 to 5 hours per day for the amount of time their household access the Internet. From Region 5, 9.9% of the population accesses the Internet for 7 or more hours per day.

[3] Of the people who responded to the survey and the question what is the last grade of class you completed in school, the majority, 41.6% responded some college. High school graduates made up 17.9% and college graduates made up 23.2% of the Region 6 survey responders. Just under 14% of the respondents, selected advance degree. Just 0.5% selected less than high school. Only 3.2% of the respondents refused to answer the question about the last grade completed in school.

[4] Most, 25.8%, of the people who responded to the Region 6 survey about income refused to answer about their household income. However, 17.9% responded $50,000-$74,999 as their combine household income before taxes. 1.6% responded $150,000 or more, similarly 4.2% responded $100-149,000. Exactly 10% responded 75,000-99,999. 40.5% of the survey responders, selected a household income less than $49,999, these included the following four categories: less than $15,000, $15,000 - $14,000, $25,000-$34,000, and $35,000-$49,000.

[5] From Region 6, 91.1% consider themselves White non-Hispanic. No one selected Asian non-Hispanic and only 0.5% responded Hispanic to the Region 6 survey. Nearly 5% selected African American. Just over 2% selected by Native American non-Hispanic.

[6] The majority of the population from Region 6 access the Internet from a home computer. Of those who responded to the survey, 82.8% selected home computer as a device they use to access the internet. The second most selected category to access to Internet is a work computer at 52.2% followed by a school computer at 34.9%. 18.7% of those who responded selected computer anywhere else. Only 7.7% of Region 6 responded no one uses the Internet anywhere. Portable devices are not as commonly used as a traditional computer, 24.4% selected smart phone, 16.3% selected other mobile phone, and 14.8% selected other portable device that can access the Internet.

[7] The majority of the Region 6 population access the internet to get news, weather, sports, or financial information. Of those who responded to the survey, 76.1% selected handle banking and/or investments. The second most selected category for use of the Internet to get news, weather, sports, or financial information at 72.2% followed by buy or sell things at 66%. 65.6% of those who responded selected, research health issues. Only 13.9% of Region 6 responded Internet phone service VoIP. Work and education related tasks are not as commonly performed on the Internet as personal activities, 37.3% selected work from home, 29.7% selected search for job information, and 42.6% selected access educational services such as distance learning.

[8] The main reasons people in Region 6 East Central Idaho, do not use the Internet is because they do not have a computer or they think it is too difficult. Of those who do not use the Internet 25% responded I do not have a computer and 25% also responded it is too difficult/frustrating. The second highest response it is no need with 20%. 15% responded I'm worried about others gaining access. Only 10% of the Region 6 population responded it is too expensive.